SERM

Environmental Protection Branch Annual Report

April 1, 2000 to March 31, 2001

Saskatchewan Environment and Resource Management

Environmental Protection Branch

SERM's Core Goals and Objectives

Core Goal	Objectives
Ensure a Clean and Healthy Environment	1. Clean Water 2. Clean Air 3. Clean Land 4. Minimize Impact of Wildland Fires on Values at Risk (e.g., people, property and natural resources)
Protect Ecosystem Health and Maintain Natural Abundance of Renewable Resources	5. Protect Endangered Wild Species and Habitat Areas within all Provincial EcoRegions on Lands under SERM's Management (e.g., Forest and Crown Resource Lands) 6. Protect Biodiversity, Natural Habitats and Ecosystem Health Across the Provincial Landscapes
Provide Fair Opportunity for Sustainable Use, Development and Enjoyment of Natural Renewable Resources	7. Ensure Equitable Allocation of Fish, Wildlife, Forests and SERM's Crown Resource Lands 8. Provide Saskatchewan Citizens Accessible Recreational and Education Opportunities on Provincial Park and Crown Resource Lands 9. Increase Economic Benefits Based on Sustainable Use and Development of Forest, Parks, Crown Resource Lands, Fish and Wildlife Resources 10. First Nations and Métis Constitutional Rights to Fish and Wildlife and their Interests in the Use of Other Natural Renewable Resources are met through Cooperative Means

The above table identifies the strategic core goals and objectives which Saskatchewan Environment and Resource Management (SERM) has proposed for the four-year period ending in 2004.

The following report provides additional detail on the key actions carried out by the Environmental Protection Branch in support of Objectives 1, 2 and 3 during the April 1, 2000 to March 31, 2001 fiscal year.

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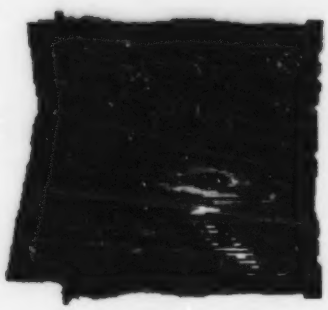
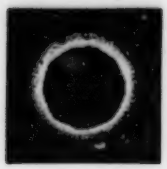




Our Mandate: *The protection and enhancement of the environment in a manner that promotes the physical, economic and social well-being of the people of Saskatchewan today and in the future.*

Branch Organization

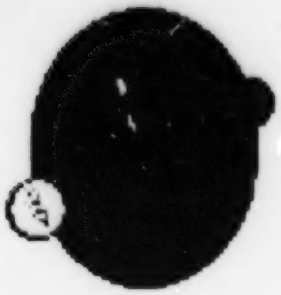
Client Services section identifies, reviews and evaluates client/stakeholder needs; coordinates, establishes and maintains client relationships; coordinates program delivery; supports regional delivery of program/initiative; delivers programs with province-wide focus; and delivers training for new initiatives.

Ecological Monitoring section designs/determines practical indicators to evaluate ecosystem health; designs monitoring programs for evaluating ecosystem/component quality/health on a provincial scale; receives, compiles, assesses and interprets environmental data collected to describe ecological health and understand impacts of activities on ecosystem components; and assists in the evaluation of criteria, guidelines, models, programs and activities designed to conserve resources, preserve the quality of environment or reduce risk to environment or health.

Planning section coordinates branch work planning with corporate level planning initiatives; leads public involvement processes for planning initiatives; assesses the priority of issues; determines the branch's strategic response to emerging and existing provincial environmental protection issues; coordinates and develops branch policy, programs and activities necessary to resolve environmental protection issues; and leads evaluation of branch initiatives to determine overall effectiveness in relation to objectives and priorities established.

Standards section develops and modifies performance measures, standards, guidelines, criteria, objectives, codes of practice, legislation and regulations stemming from branch initiatives and departmental and stakeholder needs. The section translates ecological health assessment and other information into environmental quality and designs measures of human performance as it relates to environmental quality. The section represents SERM on national and inter-provincial initiatives such as CCME and Canada-wide Standards as they relate and impact Saskatchewan.

Data Management Unit is involved in all aspects of environmental data computerization. They manage and maintain a computerized water quality database (ESQUADAT) for the province. The system provides for storage, analysis and ongoing updates of data including: drinking water, surface and groundwater, and industrial and municipal effluent quality. Data management services are provided to department, other government agencies, industrial and municipal clients and the public.



Branch Purpose: *To balance people's interaction with the environment to protect human health and ecosystem integrity.*

Branch Principles

Risk Management: requirements are applied in recognition of actual risks to ecosystems; deployment of resources to activities that pose the greatest risk to the environment

Pollution Prevention: efforts aimed at prevention of pollution rather than *cleanup* and *remediation;* includes life cycle management and stewardship approaches

Minimal Intervention: early involvement in mandated initiatives to gain broad success without the need for detailed regulation of large numbers of facilities; and being less intrusive and sharing responsibility with others for protecting the environment

Ecosystem Focus: considering the needs for ecosystem protection in all activities; ecosystem protection decisions are based on sound science

Partnership Approach: working with clients and partners to reduce impacts from smaller, dispersed activities which collectively pose a significant threat to the environment; including stakeholders in setting goals and priorities

Empowering Regulations: regulations which empower action rather than specifying prescriptive step by step approaches for achieving results; performance-based standards; seeking alternatives to regulation, such as guidelines and codes of practice

Devolution: aligning responsibility for environmental protection with the accountability for direct action

Regional Program Delivery: delivery of environmental protection programs directly to clients occurs in the eco-regions; policy and program development occurs in Regina

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The Year in Review

Environmental Protection Branch initiatives, accomplishments and activities are organized in this report to correspond to the department's corporate priorities for 2000-2001. Branch progress to Ensure a Clean and Health Environment supports this specific corporate core goal.

The corporate annual report identified SERM's Core Goals, Objectives and specific Key Actions in support of the objectives stemming from the Corporate Strategic Plan.

The following sections provide greater detail of the Key Actions and other activities carried out by the Branch in support of Core Goal 1 (Ensure a Clean and Healthy Environment) and Objectives 1, 2 and 3 (Clean Water, Clean Air and Clean Land).

Clean Water

◊ As a result of the drinking water tragedy in Walkerton, Ontario, the branch developed/revised drinking water management plans/practices and protocols for Saskatchewan. The branch developed and aided in the implementation of Saskatchewan's Interim Bacteriological Follow-up Procedure, supported and tracked the Precautionary Drinking Water Advisories. Contributing to safe drinking water for the province, led the development of the regulatory amendments requiring certification of at least one operator for each licensed waterworks and sewage works. Early evaluation and review of *The Water Pollution Control and Waterworks Regulations* was initiated.

To March 31 of 2001, there were 69 applications for certification and 45 certificates granted. SIAST and a private contractor offered training opportunities and operators wrote certification examinations at sessions organized and advertised by the Saskatchewan Water and Wastewater Association.

◊ Regulations and standards were developed (came into force in June 2000) for mandatory municipal water and wastewater operator certification. All municipal water and wastewater facilities must be under the direction of a certified operator within five years. To be certified, an operator must pass designated exams and have appropriate education and work experience. The Operator Certification Board issues certificates and sets certification and examination fees. Saskatchewan's certification program is recognized throughout North America. Previously a voluntary program, these new regulations will place Saskatchewan alongside other jurisdictions with mandatory programs in place, including Nova Scotia, Alberta, British Columbia and most states in the United States.

Developed a Water Quality Index for Saskatchewan through a review of potential indices and the Canadian Water Quality Index were selected. Work will now focus on parameter and objective selection/rationalization to customize the Index for Saskatchewan's needs. SERM continued to be involved in the Canadian Drinking Water Quality Guidelines.

◊ SERM continued to be involved in the development of the Canadian Drinking Water Quality Guidelines through the Federal/Provincial Drinking Water Subcommittee. A new maximum acceptable concentration (MAC) of 30 ug/L (parts per billion) for total uranium was established for the guideline. Work was finalized on the scientific supporting document for protozoa. The subcommittee drafted a new turbidity guideline. SERM continued to be involved in the verification works of the analytical method for microcystin-LR. SERM completed a Trihalomethane (THM) data survey requested by Health Canada. SERM reviewed a draft report on treatment options for controlling THM. SERM continued to participate in the National Task Force on Chlorinated Disinfection By-Products (CDBP).

◊ Developed the 1999/2000 Drinking water compliance report addressing Saskatchewan's municipal drinking water quality and monitoring compliance status. All monitoring data required by Minister's Orders to Operate waterworks submitted by municipalities for the fiscal year was reviewed, assessed and compiled into the report.

Represented Saskatchewan's interests in a National Strategy pertaining to municipal wastewater effluents through a CEPA-NAC (*Canadian Environmental Protection Act*-National Advisory Council) subgroup on municipal wastewater. This subgroup continues to meet on a regular basis exploring various legislative and other instruments available to address substances found in wastewater recentlv determined to be toxic.

◊ During 2000/2001 SERM's participation on the CCME Water Quality Guidelines Task Group focused on the completion of guidelines for several parameters including Ammonia in water and Dioxins and Furans in tissue and sediment. Work began or progressed on mercury and methyl mercury guidelines for protection of aquatic life in support of the Mercury Canada-wide Standards process as well as phosphorus in surface water and nonyl-phenols in sediment and surface water. The guidelines and index produced will result in increased ability to protect Saskatchewan's valuable water resources while providing tools to aid in measuring these types of achievements.

◊ Studies on the exceedence of sodium objectives in the Qu'Appelle and Carrot Rivers for the Prairie Provinces Water Board were conducted. Carrot River Report completed and well received by Prairie Provinces Water Board (PPWB). The Qu'Appelle River report was not completed by fiscal year end.

During 2000/2001 SERM's revised version of the Prairie Provinces Water Board (PPWB) water quality objectives for border sites along the Saskatchewan-Alberta boundary were fully accepted by the PPWB. The objectives will aid in ensuring good water quality in those streams entering the province from Alberta while providing tools to aid in measuring these types of achievements.

◊ SERM helped organize The 9th National Conference on Drinking Water in Regina (May 2000) and was also the conference's co-chair. SERM was elected as Chairperson for the Federal/Provincial Drinking Water Subcommittee.

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◊ SERM helped organize The 9th National Conference on Drinking Water in Regina (May 2000) and was also the conference's co-chair. SERM was elected as Chairperson for the Federal/Provincial Drinking Water Subcommittee.

◊ Implemented Water Management Framework action item #1 to develop indicators and monitor the health of drinking water sources and aquatic ecosystems. This action is a key component of an ecological monitoring program to determine the overall health of aquatic ecosystems, including sources of drinking water. Indicators such as the Water Quality index and the Tropic Index have been developed to monitor the health of aquatic ecosystems. The data collected will help guide future water resource management and also identify existing significant problems as well as future threats. Ongoing compliance monitoring by municipalities will continue to be required.

◊ Provincial Contaminants in Fish Committee, comprised of representatives from SERM's Environmental Protection and Fish and Wildlife Branches, along with Saskatchewan Health, meets annually to review contaminants-in-fish data for Saskatchewan lakes. The data is used to update the document "Mercury in Fish: Guidelines for Consumption".

◊ Water Management Framework action item # 47 recommended the establishment of a provincial working group to provide recommendations for the development and operation of an integrated water-related database. A management framework was developed with the lead agency, Sask Water, to provide recommendations for the development and operation of an integrated water-related database.

Research into the production of algal toxins in lakes and rivers by blue-green algae continues with efforts to derive a correlation between water chemistry and algae blooms. A portable filtration unit for sample collection purposes has been conceived with plans for testing in the summer of 2001.

◊ Satellite imagery data was used to identify shallow lakes in the West Boreal and Shield Eco-Regions that are prone to damage by acid rain. Identified 10 lakes to be considered for monitoring and this list was forwarded to the Tar Sands Working Group for approval. Due to the high soil sensitivity of these EcoRegions and the trans-boundary activities adjacent to these areas, sites have been set up in various areas to collect and analyze rainwater for pH and major ions.

◊ A study on the ground water quality was completed on two aquifers in the Yorkton area, the Collacott and Logan Aquifers. These aquifers constitute two of the five-groundwater sources of drinking water for the City of Yorkton. As well, the near-surface position makes these aquifers highly susceptible to contamination from surface pollutants. Trend analysis was completed on three different parameters (sodium, total dissolved solids, chloride) from 12 wells for a total of 36 analyses. Of these 36 analyses, nine trends were detected within the 95 per cent confidence level. Of these nine trends, six were decreasing and three increasing. The other 27 analyses indicate that parameters in those well have been unaffected by any possible impacts. It was concluded the groundwater quality has remained stable for the most part over the time of monitoring, 1994 to 2000.

◊ A draft report on the water quality of Kenosee Lake was completed and is being reviewed for finalization prior to printing.

- ◊ EPB is member of the Yorkton Groundwater Technical Committee, which has developed an aquifer management plan for the Yorkton area. The committee, in order to conduct a water quality study of the Leech Lake Aquifer system, retained the services of the Saskatchewan Research Council. It was found there is no evidence of nitrate contamination and the concentrations throughout the aquifer are less than 1mg/L as NO_3. Trace metal concentrations are well below the water quality guidelines except those for iron and manganese.

- ◊ An annual water quality-monitoring program on Tobin Lake was initiated in 1994 as part of the Branch's Recreational Lake Assessment Program. A draft summary report was completed in 2000 and is being reviewed prior to publication.

- ◊ Fact sheets on techniques for monitoring of surface water, groundwater and sediments were prepared and distributed to the Eco-Regions to assist them in establishing ecosystem monitoring programs. Draft procedures manual for surface water and sediment sampling was prepared and is being reviewed for finalization.

- ◊ Saskatchewan is in the midst of a major expansion in hog numbers, and there are concerns about negative environmental impacts, including the possible deterioration of surface water quality. SERM and Saskatchewan Agriculture and Food, are conducting a monitoring program in the vicinity of several large hog operations to obtain baseline water quality data during spring runoff.

- ◊ The Codette Reservoir was formed by the construction of the Francois-Finlay Dam on the Saskatchewan River near Nipawin in 1985. Since then, annual water quality monitoring has been carried out to address concerns about low dissolved oxygen levels in the deeper parts of the reservoir and the Saskatchewan River downstream of the dam.

- ◊ SERM is reviewing possible environmental impacts of the CanGro Aquaculture Project on Lake Diefenbaker and will set monitoring requirements for the project. Issues related to the expansion of the aquaculture industry on Lake Diefenbaker are also addressed.

- ◊ GPS (global positioning system) Verification changes on Esquadat station locations are an ongoing project. When samples are collected in the field by staff GPS readings are taken and submitted. The verification/changes are then made to the Esquadat Station Definition Table. The surface water data will be available on SERM's website in 2002. The verification of the Esquadat Methodologies has been ongoing throughout the year. Environment Canada has been contacted to obtain new analytical methods for update into the Esquadat Method Definition Table.

Clean Air

◊ SERM continued to participate as a member of the development committees for Canada-Wide Standards for Petroleum Hydrocarbons, Mercury, Dioxins and Furans, and Particulate Matter and Ozone. These national environmental standard setting initiatives will generate emission standards for sectors which emit mercury or dioxins and furans as well as develop ambient guidelines to aid in the management of all three parameters already present in the environment. This national initiative has also generated an ambient standard for Particulate Matter and Ozone which will reduce other air pollutants. This standard made it necessary for SERM to participate with other provinces and the federal government to begin developing a multi-pollutant emissions reduction strategy in the 2000-2001 fiscal year.

◊ During the 2000-2001 year, air emission standards for mercury, dioxins and furans and a number of ambient environmental guidelines were developed and in some cases fully ratified. Performance was measured by production of standards or adherence to related work plans. Canada-wide Standards (CWS) for Mercury for the base-metal smelting and incineration sectors were ratified during the year. Draft standards for mercury arising from fluorescent tubes and dental amalgam were completed and will ultimately result in reduced mercury emissions in Saskatchewan and thereby better human and environmental health. Standards for remediation of Petroleum Hydrocarbon spilled materials were completed and accepted in principle during the year. Standards for the management of air emissions of dioxins and furans for the pulp and paper - salt laden fuel wood and the incineration sectors were ratified during the year.

◊ The National Air Issues Coordinating Committee (NAICC), under the NOx / VOC Management Plan, developed several codes of practice for the reduction of emissions from industrial coating applications.

◊ National Air Pollution Surveillance (NAPS) Program for Regina and Saskatoon is a joint project operated by both provincial and federal governments. It was developed to obtain information on air pollution levels in the urban areas of Canada. The data is also used for the planning of control programs and for the development of ambient air standards. Monitoring the Canada-wide standards for particulate matter and ground level ozone has been collected through the NAPS monitoring sites and forwarded to Environment Canada for this fiscal year.

Provincial air contaminant emission inventory: industrial emissions are collected every five years and preliminary planning was conducted in preparation for the Y2K emissions inventory. Industry needs to submit information in 2001.

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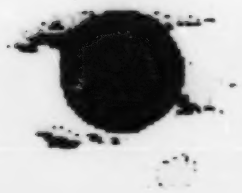


As a member of the Federal/Provincial Working Group for Controls Harmonization of Ozone Depleting Substances (ODS), the province participated in the development and implementation of an extended producer responsibility program. The branch continued to work on revising *The Ozone Depleting Substances Control Act and Regulations* to address commitments in the National Action Plan.

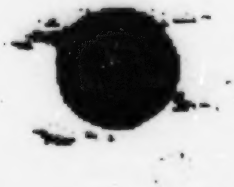
◊ Provincial acid emissions inventory: As part of the provincial reporting and communications obligations of the Canada-wide Acid Rain Strategy for Post-2000, SO2 and NOx industrial air emissions were collected via the regional offices and forwarded to the Acid Rain Working Group.

As part of the regulations, a person who successfully completes a prescribed course in the proper recovery, recycling and handling procedures for sealed systems containing an ozone-depleting substance, are certificated and are allowed to purchase ozone-depleting substances. In this fiscal year, there were 315 successful participants for a total of 6,673 to date.

◊ As a result of a need for increased compliance and enforcement activities regarding burning at landfills, identified by the EcoRegions, a detailed analysis was required to determine the best approach to bring the owners of landfills into compliance with the law. Background information on the burning issue and three options, which, could be utilized to effect compliance and enforcement of burning at landfills were considered until changes in legislation could be initiated and completed.

Emissions and Projections Working Group (EPWG) is a technical working group made up of emissions inventory, forecasting and back-casting experts and practitioners within all provincial and territorial energy and environment ministries, and the federal government. The EPWG coordinates federal/provincial work in producing Canada's emissions inventories and forecasts, specifically for Criteria Air Contaminants (CAC) and Greenhouse Gases (GHG).

An Air Monitoring polling/database called Central Data Management System (EMS) was purchased to poll and maintain Saskatchewan air quality data. All data is collected directly from the industries. SERM is able to request additional data from E.P.W.G. if information is required.



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Clean Land

◊ The 2000/01 Centenary Fund Program – Municipal Infrastructure Core Area – The 2000/01 provided funding to regional waste management authorities: the Red Coat Waste Resource Authority for recycle equipment; the North Central Saskatchewan Waste Management Corporation Inc. to build a material recycling facility and purchase recycling bins; and the Saskatoon Waste Management Authority for recycle bins.

SARCAN RECYCLING

SARCAN was created in 1988 when Saskatchewan Environment and Resource Management contracted the Saskatchewan Association of Rehabilitation Centres (SARC) to operate a province wide depot system to collect and recycle beverage containers. Currently, SARCAN operates 71 collection depots in 62 communities, two processing plants and an administration center (in Saskatoon). SARCAN employs 365 people, over 80% of who are persons with disabilities or formerly on social assistance. During the 2000/2001 fiscal year 202,176,225 containers eligible under the program were retuned. This figure constitutes an 84.59% return rate.

◊ Represented the department/province in the development of a Waste Characterization Methodology in cooperation with the Corporations Supporting Recycling (CSR). Participated in "GAP", the waste characterization methodology process spearheaded by CSR. The objective of GAP was to develop a method to measure municipal solid waste volumes that could be applied universally and remove the confusion caused by widely varying waste measurement techniques used across Canada. A manual was completed but due to the large variance in size and solid waste management techniques conducted across Canada, the manual applies only to municipalities with populations over 50,000 people. Application of the manual in Saskatchewan would be limited, as there are only two municipalities that fit into the minimum size requirement.

The Saskatchewan Association for Resource Recovery Corporation (SARRC) collected approximately 15 million litres of used oil, 1.7 million used oil filters and 158,000 kilograms of plastic oil containers. By March of 2001, there were 31 EcoCentres and 260 used oil collection facilities in 158 Saskatchewan communities where used oil, filters and containers could be safely disposed.

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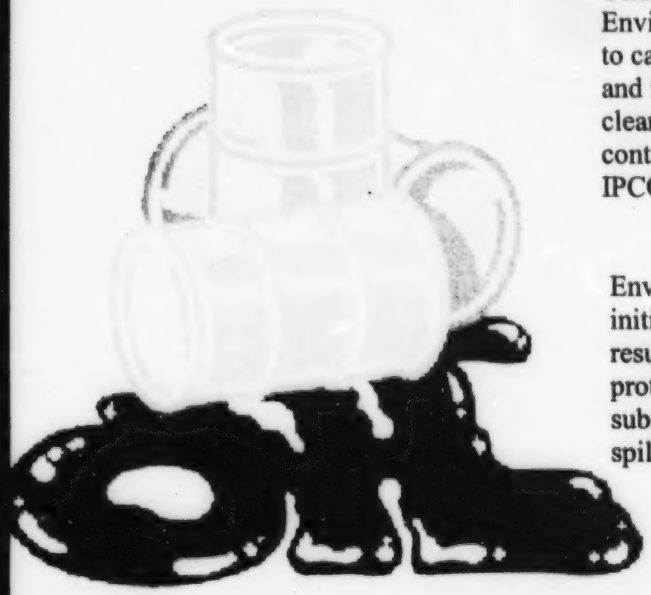
The Scrap Tire Management Program, managed and operated by the Saskatchewan Scrap Tire Corporation (SSTC), collected the equivalent of 1.3 million passenger tires - over 11.8 million kilograms of rubber. The SSTC collected approximately $3.7 million in Tire Recycling fees. Approximately 2.5 million was returned to the provincial economy in the form of recycling credits paid to the collectors and processors. The rubber was processed into a number of products, such as, mats, flooring, landscaping materials, fuels, and used in civil engineering applications. To date, 50 communities were involved in Phase II of the Program to remove and recycle scrap tires stockpiled at municipal landfill sites.

- ◊ Developed a policy and strategic plan to reduce overlap and duplication with the Canadian Nuclear Safety Commission regarding Saskatchewan's regulated uranium mining facilities. Supported the development of an agreement for the cleanup of the abandoned Gunnar and Loredo uranium mining.

- ◊ CCME - Hazardous Waste Task Group addressed disposal issues for the following items; PCB contaminated demolition debris, lead containing costume jewelry and lead core candle wicks. Development began on the issue of Environmentally Sound Management (ESM). The group undertook the process of reviewing all CCME guidelines with respect to hazardous waste.

- ◊ The Hazardous Substances Waste Dangerous Goods Regulations were revised and revisions implemented regulatory provisions for the application of product delivery restrictions (clause 9.5) in order to support ongoing implementation of storage facility compliance activities. The amendment aided in gaining compliance by ensuring the legal soundness of regulatory provisions enabling product delivery restrictions.



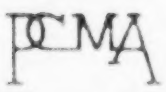
Under the 2000/01 Centenary Fund Program for Environmental Cleanup, contracted engineering companies to carry our 310 Phase 1 environmental site assessments and identified 30 high risk orphaned service stations for cleanup during 2001. Initiated cleanup on three contaminated industrial sites: NWR Salvage in Saskatoon, IPCO in Corman Park and Shragge Steel in Regina.

Environmental Spill Control Regulation Review was initiated and ultimately the amendment process will result in maintaining a high level of environmental protection when dealing with spills of hazardous substances and wastes while reducing the burden of spill reporting to some degree.

◊ During 2000/01 SERM's participation on the CCME Soil Quality Guidelines Task Group aided in the completion of soil guidelines for Dioxins and Furans in support of the Canada-wide Standards (CWS) process for that parameter. The task group continued to expend a significant amount of time in support of the CWS Petroleum Hydrocarbons initiative.

Saskatchewan Petroleum Industry Government Environmental Committee (SPIGEC) of which SERM, other government departments and industry stakeholders are a part of, continued to meet to provide the latest information regarding department activities, standards and codes of practice.

◊ Municipal Solid Waste Management Assistance Program (MSWMAP) Summary Report was prepared to provide a quick overview of the MSWMAP Evaluation Report that SERM had completed the previous fiscal year for Regional Landfills in the Province.



The Saskatchewan Pesticide Return program was launched in 1999 to collect unwanted farm pesticide chemicals. About 30 retailers participating in Central Saskatchewan collected a total of 47,150 liters of liquids and 14,593 kilograms of solids for disposal in an environmentally responsible manner.

Under the Pesticide Container Collection Program, crop protection distribution companies, approximately 200 participating retail dealers and about 240 collection sites provided by rural municipalities became voluntary participants in the program. Approximately 1.7 million or 530 tonnes of containers (60% return rate) were collected.

◊ Pesticide Container Site Closure Guideline Committee, formed in 1999, developed draft guidelines during the 2000/01 fiscal year for the decommissioning and reclamation of pesticide collection sites established under the former Pesticide Container Disposal Program. Soil testing at these sites continues to verify the reclamation criteria proposed in the draft guidelines.

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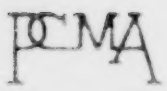

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- ◊ The Branch in conjunction with stakeholders presented the Paper Product Stewardship Options Report, which identified six strategic management options to reduce the amount of paper entering Saskatchewan's landfills (national, industry run, provincial, third party and municipal programs and enhancement of the present system). The report's purpose was to provide a menu of potential strategies for SERM's consideration. The report also examined other jurisdictions and the present system in Saskatchewan.

- ◊ Industry in cooperation with Environment Canada has developed a code of practice for the storage of wood treating chemicals under the CEPA Strategic Options Report - Wood Preservation.

- ◊ EPB solid waste management forum provided staff with the history, background, legislation and program procedures in solid waste. The forum identified 18 program delivery, 10 program development and 16 legislation gaps and issues which were ranked in order of importance. Many gaps and issues could be handled in the short term while others will require long-term planning and implementation.

- ◊ The branch participated in the Canadian Environmental Protection Act (CEPA) toxic substance assessment and review. This is an ongoing activity conducted in order to serve the interests of environmental protection and Saskatchewan based stakeholders. Ultimately the review will result in maintaining a high level of environmental protection when dealing with toxic substances.

- ◊ SERM provided comments to Environment Canada about the proposed inclusion of road salts to Schedule 1 of CEPA 1999.

Other Branch Activities

- Conducted a strategic review of EPB's legislation including a cursory review of regulations, relating to principles and gaps and prepared recommendation action plan for changes including a framework document for government consideration.

- The branch consulted with EcoRegions in the development of performance measures and Key Actions for Clean Air, Land, and Water related objectives for the Corporate Strategic Plan. Ensured consistency of corporate and branch planning objectives and activities. Referenced the corporate plan when developing EPB's work plan, and influenced the corporate strategic plan, liaison with Eco-Regions on development and implementation of environmental protection priorities.

- Compiled the 1999-2000 Environmental Protection Branch (EPB) activities for inclusion in the Corporate Annual Report. The EPB annual report was also published to compliment the SERM corporate annual report.

- Discussions and correspondence with other CCME member jurisdictions were held to refine the protocol for Canada-wide Standard (CWS) substance nomination and selection. A revised CWS nomination and selection protocol was completed.

- The Branch increased the number of publications and information pieces available on SERM's website for greater access to stakeholders and the public. The Internet is seen as another information media that could be utilized more by the department.

Department's water quality database contains over 475,000 sample results, more than 3.4 million measurements and 9,152 stations. In the 2000/01 fiscal year 27,404 samples were analyzed, with 132,642 measurements representing 1,768 sampling locations and 225 unique variables, which are all stored on the department's water quality database ESQUADAT. (These reported values are higher than those originally reported in the Corporate Annual Report due to additional 2000 data uploaded after the report was published).

- The branch updated the filing system to correspond with the Saskatchewan Administrative Records Systems (SARS) and developed a corresponding internal Operational Records System (ORS). The majority of administrative files were transferred to the new system. The ORS was developed and approved and a significant number of old and inactive files were identified and shipped for storage.

- SERM handles Environmental File Searches, which consist of locating information for land acquisition, regarding storage of hazardous substances and spills for clients, consultants and the public. Several options will be evaluated (such as Land Titles, Web server, private involvement, etc.)

- The branch is currently reviewing the background information and the current state of the departmental data release policy.

- Cumulative Effects Monitoring has been undertaken in the Shield EcoRegion since 1995. In 2000, the data for 1995 to 2000 was successfully updated into the corporate database.

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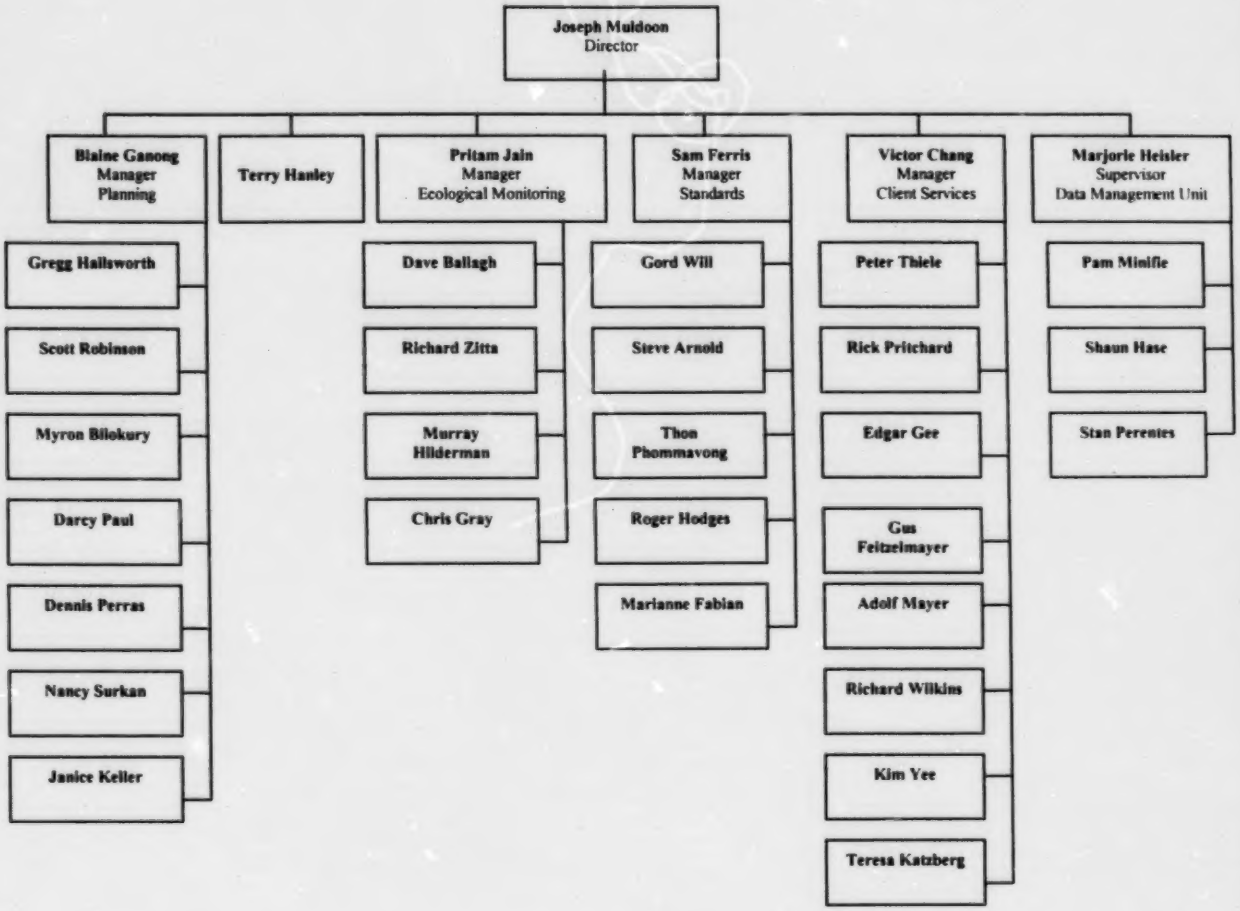
SASKATCHEWAN ENVIRONMENT AND RESOURCE MANAGEMENT
PROGRAMS DIVISION
ENVIRONMENTAL PROTECTION BRANCH



Personnel Changes During the 2000/2001 Fiscal Year

Jacqueline Lukey left the Planning Section in May 2000
Stan Perentes began in June 2000
Terry Hanley began in November 2000

Environmental Protection Programs

The Branch administers the following province-wide programs:

- ◊ Air Quality Program
- ◊ Ambient Water Quality
- ◊ Aquatic Nuisance Control Program
- ◊ Beverage Container Collection and Recycling Program
- ◊ Classification Program
- ◊ Climate Change
- ◊ Contaminated Site Management
- ◊ Cumulative Effects Monitoring
- ◊ Environmental File Search Program
- ◊ Ground Water Quality
- ◊ Hazardous Substances and Waste Dangerous Goods
- ◊ Hydrostatic Pipeline Testing
- ◊ Liquid Waste Haulers
- ◊ Mining (coal, clay, peat, potash, uranium, salt, sodium sulphate, gold and base metals)
- ◊ Municipal Drinking Water
- ◊ Ozone Depleting Substances
- ◊ PCB storage
- ◊ Pesticide Container Management
- ◊ Saskatchewan Pesticide Return Program
- ◊ Scrap Tire Recycling Program
- ◊ Solid Waste Management
- ◊ Transportation of Waste Dangerous Goods Program
- ◊ Used Oil Collection Program
- ◊ Voluntary operator certification and the water and wastewater treatment facility
- ◊ Waste Minimization and Recycling

Committees and Task Groups

EPB works with numerous individuals, organizations and industries at the local, regional, provincial, national and international level. The committees and task groups listed below are involved in environmental and resource management decisions and have a working relationship with the branch.

- Aboriginal Affairs Network (SERM)
- Agricultural Burning Working Group
- Biodiversity Action Plan
- CCME
  - Ad Hoc Toxics Group
  - Cleaner Vehicles and Fuels Task Group
  - CWS - Sub-agreement
  - CWS - PM & Ozone
  - CWS - Mercury
  - CWS - Dioxins & Furans
  - CWS - Benzene
  - CWS - Petroleum Hydrocarbons
  - Economic Integration Task Group
  - Environmental Assessment. Sub-agreement
  - Environmental Emergencies Sub-agreement
  - Environmental Inspection and Enforcement Sub-agreement
  - Environmental Monitoring and Reporting Sub-agreement
  - Environmental Planning and Protection Committee
  - Hazardous Waste Task Group
  - NOX/VOCS Management Plan
  - Packaging Task Group
  - Pollution Prevention Network
  - Research and Development Sub-agreement
  - Soil Quality Guideline Task Group
  - Water Quality Guideline Task Group
  - National Air Issues Coordination Committee – Air (NAICC-A)
    - Acidifying Emissions Task Group
    - Benzene Working Group
    - F-P Working Group on Controls Harmonization (ODS)
    - HAPS Task Group
    - NEIPTG
      - Public Education Task Group
      - Science Network
      - Smog Task Group
      - Socio-Economic Analysis Task Group
      - Transportation Working Group
  - NAICC-Climate Change (CC)
- CEOH Drinking Water Subcommittee
- CEPA- FPAC
  - Strategic Options Process
  - Toxic Substances
  - Working Group on Air Quality Objectives and Guidelines
- City of Regina Drinking Water Advisory Task Force

City of Saskatoon Boil Water Advisory Task Force
Climate Change
    Government Committee
    SERM Core Group
    Stakeholder Committee
Data Integration Working Group (SWC)
Data Working Group (Alberta Environment./Federal.)
Disinfection Byproducts Task Group - Water Quality Issues Subgroup (Health Canada)
Ecol. Ind. Working Group for Soils/Water
Ecosystem Management Guidelines Group
Ecosystem Monitoring Alliance Group
Environment Canada/SERM Accord
Environmental Effects Monitoring - Metal Mining
Environmental Effects Monitoring - Pulp and Paper
ESQUADAT Steering Committee
Executive Secretaries Forum
Fish Culture Project - Lake Diefenbaker
F-P-T Committee on Pest Management & Pesticides
Glycol Dehydrator Working Group
Information Management Steering Committee
Integrated Policy Working Group
McKenzie R. Basin Trans-boundary Water
National Soil and Water Conservation Program
OECD Task Force on Endocrine Disruptors
Organizational Development Working Group
Paper Product Stewardship Committee
Partners for Saskatchewan River Basin
Partnership with Saskatchewan Agriculture and Food
Pesticide Container Management Association
Prairie Provinces Water Board
    Committee on Water Quality
    Steering Committee
    Task Force on Data Management Systems
Rail Line Abandonment Committee
Regina, Yorkton and Southeast Aquifers Technical Committee
Riparian Zone Management Committee
SARCAN
SARRC (Used Oil Collection)
Saskatchewan Evaluation of Oil Sands Working Group
Saskatchewan/Manitoba Accord
Saskatchewan River Issues Committee
Souris River Bilateral Water Quality Monitoring Task Group
SPIGEC
Saskatchewan Scrap Tire Corporation
SWRC
SWWA Executive
Union Management Advisory Committee
Uranium Core Group
Water Issues Group

Primary Partners and Stakeholders

The following is a list of the branch's major stakeholders. This is not a complete listing, but it provides an indication of groups which the branch has frequent on-going contact.

- Canadian Association of Petroleum Producers (CAPP)
- Canadian Bankers Association
- Canadian Federation of Independent Business (CFIB)
- Canadian Petroleum Products Institute (CPPI)
- Crop Protection Institute of Canada
- Environment Canada
- Federated Cooperatives Limited
- Husky Oil
- IPSCO
- Interprovincial Pipeline
- IMC - Kalium
- Saskatchewan Action Foundation for the Environment
- Saskatchewan Association of Automotive Repairers
- Saskatchewan Association of Rehabilitation Centres (SARC)
- Saskatchewan Association of Rural Municipalities (SARM)
- Saskatchewan Eco-Network (SEN)
- SaskEnergy Incorporated
- Saskatchewan Environment and Industry Managers Association (SEIMA)
- Saskatchewan Environmental Society (SES)
- Saskatchewan Mining Association
- Saskatchewan Potash Producers Association
- SaskPower Corporation
- Saskatchewan Research Council (SRC)
- Saskatchewan Urban Municipalities Association (SUMA)
- Saskatchewan Waste Reduction Council (SWRC)
- Saskatchewan Water and Wastewater Association (SWWA)
- Sask Water Corporation
- Saskatchewan Weekly Newspaper Association (SWNA)
- Waste Advisory Council of Saskatchewan (WACS)

Acts and Regulations
(Legislative Framework used by Environmental Protection Branch)

1. **Environmental Management and Protection Act**
   Water Pollution Control and Waterworks Regulations
   Municipal Refuse Management Regulations
   Environmental Spill Control Regulations
   Hazardous Substances and Waste Dangerous Goods Regulations
   Used Oil Collection Regulations
   PCB Waste Storage Regulations
   Mineral Industry Environmental Protection Regulations
   The Scrap Tire Management Regulations

2. **Clean Air Act**
   Clean Air Regulations
   Potash Refining Air Emissions Regulations

3. **Litter Control Act**
   Litter Control Designation Regulations

4. **Ozone Depleting Substances Control Act**
   Ozone Depleting Substances Control Regulations